

**Mr. Glenn Carlson**  
Missouri Department of  
Natural Resources  
7045 Highway 94 South  
St. Charles, MO 63304

Dear Mr. Carlson:

### TOTAL ACTIVITY ESTIMATION - QUARRY AREA

An estimation of the total radionuclide activity for each media in the quarry area has been prepared in response to your comments on the Draft Final of the *Remedial Investigation (RI) the Quarry Residuals Operable Unit*. Total activity has been estimated for those media with radionuclide activity greater than two times background. The calculated activity is that portion contributed to each media due to impact for the quarry bulk wastes and does not account for the natural activity contributed by background. For comparative purposes, estimation for background have also been provided.

This estimation does not have any impact on those radiochemical parameters which have been identified as contaminants of concern in the RI/BRA. Those radiochemical parameters are:

	Quarry Proper Soil & Fractures	Surface Water	Sediment	Quarry Grndwtr
Radium-226	X			
Radium-228	X			
Thorium-228	X			
Thorium-230	X			
Thorium-232	X			
Uranium	X	X	X	X

The results of this total activity estimation are in agreement with those Contaminants of Concern identified in the RI/BRA, indicating that those radiounuclides contributing to the total activity of the area are uranium in all media and Ra-226, Ra-228, Th-228, and Th-230 in the quarry proper soils and fractures.

[illegible]

Mr. Glenn Carlson

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If you have further questions, please contact Becky Cato, Project Management Contractor  
(314)441-8086, ext. 3507.

Sincerely,  
Original Signed By  
Angela Pickett

Angela Pickett  
Acting Deputy Project Manager  
Weldon Spring Site  
Remedial Action Project

cc: Dan Wall, EPA  
Larry Erickson, MDNR  
Mary Picel, ANL  
Weldon Spring Citizens Commission  
Gene Valett, PMC  
Steve Warren, PMC  
Becky Cato, PMC

EW-94:KReed:x7008:emh:10/24/97 (m:Total Activity Estimation)

CONCURRENCE/ REVIEWED BY:	RTG SYMBOL	EW-94
INITIALS/SIG.	KReed	
DATE	10/4/97	
CONCURRENCE:	RTG SYMBOL	EW-94
INITIALS/SIG.	APickett	
DATE	11-3-97	
CONCURRENCE:	RTG SYMBOL	
INITIALS/SIG.	PAI	
DATE	11/3/97	
CONCURRENCE:	RTG SYMBOL	
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